

IN THE CLAIMS

Please amend the claims as follows:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A system for use with a broadband network, the system comprising:

~~a data collector configured to be coupled to at least a portion of the broadband network and configured~~ coupled to obtain network performance metrics from network elements in the at least a portion of the broadband network; and

~~a data processor configured to process the obtained network performance metrics to yield normalized network performance metrics by adjusting the obtained network performance metrics.~~

logic to normalize the performance metrics by applying device-specific information for the network elements from which the network performance metrics were obtained.

2. (Cancelled)

3. (Original) The system of claim 2 wherein the device-specific information includes at least one of make, model, hardware version, software version, and element settings associated with each of the network elements.

4. (Currently Amended) The system of claim 2 wherein the data collector is further configured to obtain at least one of ~~MIB~~ Management Information Base objects and command line interface information from the network elements and the ~~data processor is~~

~~further configured to~~ logic is further to determine the device-specific information from the at least one of ~~MIB~~ Management Information Base objects and command line interface information.

5. (Original) The system of claim 1 wherein the network performance metrics are remotely-accessible standard management instrumentation.

6. (Currently Amended) The system of claim 5 wherein the broadband network is a Data Over Cable Service Interface Specification (DOCSIS) network and the network performance metrics include at least one of signal-to-noise ratio, power level, equalizer coefficients, settings information, error information, counter information, bandwidth, quality of service, latency, and jitter.

7. (Currently Amended) The system of claim 1 wherein ~~at least one of the data collector and the data processor comprise~~ the logic comprises software instructions and a computer processor configured to read and execute the software instructions.

8. (Previously Presented) A computer program product residing on a computer-readable medium and including computer-executable instructions for causing a computer to:

- obtain network performance metrics from broadband network elements;
- use network management instrumentation associated with the broadband network elements to determine which of multiple calibration algorithms to apply to the obtained network performance metrics; and

- normalize the obtained network performance metrics using the determined calibration algorithm to yield normalized network performance metrics by adjusting the obtained

network performance metrics, as appropriate, such that a first network performance metric from a first network element and having a first value and a second network performance metric, from a second network element and of a similar type as the first network performance metric, and having a second value, different from the first value, yield first and second normalized network performance metrics.

9. (Currently Amended) The computer program product of claim 8 wherein the network management instrumentation includes ~~MIB~~ Management Information Base objects and the instructions for causing the computer to use the network management instrumentation are for causing the computer to identify the first and second network elements using the ~~MIB~~ Management Information Base objects.

10. (Original) The computer program product of claim 9 wherein the instructions for causing the computer to identify the first and second network elements cause the computer to determine at least one of make, model, hardware version, software version, and settings of each of the first and second network elements.

11. (Currently Amended) A method of calibrating a broadband network performance metric of a first broadband network element, the method comprising:

~~obtaining network performance data;~~

~~obtaining first values indicative of the broadband network performance metric from the obtained network performance data;~~

~~obtaining second values indicative of the broadband network performance metric provided by the first broadband network element, the second values being correlated to the first values; and~~

~~deriving a relationship between the first values and the second values of the
broadband network performance metric to convert the first values to the second values.~~

analyzing network traffic associated with the first broadband network element to
determine network performance values;

obtaining expected values for the network performance values of the first broadband
network element;

deriving a relationship that maps the network performance values of the first
broadband network element to the expected values; and

altering network operation if the network performance values fail to meet
performance standards.

12. (Currently Amended) The method of claim 11 wherein
~~obtaining the network performance data comprises measuring characteristics of a
network associated with the first network element,~~
~~the network is a DOCSIS network, and~~
obtaining the ~~second~~ expected values comprises polling MIB Management
Information Base objects of the first network element.

13. (Currently Amended) The method of claim 12 wherein deriving the relationship
comprises curve fitting the ~~first and second values~~ network performance values and the
expected values.

14. (Currently Amended) The method of claim 13 wherein deriving the relationship
further comprises determining coefficients of a polynomial describing the ~~second values as a
function of the first values~~ expected values as a function of the network performance values.

15. (Currently Amended) The method of claim 11 wherein the network performance data are obtained corresponding to a range of ~~first values and second values~~ network performance values and expected values.

16. (Currently Amended) The method of claim 11 further comprising injecting test data into at least a portion of the network associated with the network element to affect the network performance values data.

17. (Currently Amended) The method of claim 12 wherein deriving the relationship comprises using ~~third~~ values of ~~MIB~~ Management Information Base objects other than ~~the second values~~ those that provided the expected values.

18. (Cancelled)

19. (Currently Amended) The method of claim 17 wherein the ~~MIB~~ Management Information Base objects other than ~~the second values~~ those that provided the expected values are of at least one of codeword errors, power levels, equalizer settings, and packet size distributions.

20. (Currently Amended) The method of claim 19 wherein the ~~MIB~~ Management Information Base objects other than ~~the second values~~ those that provided the expected values are of codeword errors, the ~~first values~~ network performance values are of signal-to-noise ratio, and the ~~second values~~ expected values are of channel noise ratio.

21. (Previously Presented) The system of claim 6 wherein
the broadband network performance metrics further include at least one of a codeword error, a power level, an equalizer setting, and a packet size distribution, and
the data processor is configured to process at least one of a signal-to-noise ratio, a power level, an equalizer coefficient, a settings information, an error information, a counter information, a bandwidth, a quality of service, a latency, and a jitter and at least one of the codeword error, the power level, the equalizer setting, and the packet size distribution to yield the normalized metrics.

22. (Previously Presented) The system of claim 21 wherein the data processor is configured to process signal-to-noise ratio metrics and codeword error metrics to obtain channel noise ratio normalized metrics.